

212/464

In the claims:

1. (cancelled)

2. (currently amended) A system for performing chest compressions on a patient, said system comprising:

a compression belt cartridge comprising:

a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral circumference of the patient when the belt is disposed around the patient;

said belt having pull straps, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

wherein the first load distribution section and the second load distribution are wider than the pull straps; and

a means for tightening the belt, wherein the ~~compression belt cartridge is~~ pull straps are attachable to the means for tightening the belt.

3. (original) The system of 2 wherein the belt further comprises a first transition section attached to the first load distribution section and to the pull straps, and a second transition section attached to the second load distribution

212/464

section and to the pull straps, wherein the second transition section is opposite the first transition section.

4. (original) The system of claim 3 wherein the first and second transition sections have a trapezoidal shape.

5. (original) The system of claim 3 wherein the belt cartridge further comprises a first reinforcing plate attached to the first transition section and a second reinforcing plate attached to the second transition section.

6. (original) The system of claim 3 wherein:

the system further comprises a belt drive platform;

the means for tightening the belt is disposed within the belt drive platform; and

the belt cartridge further comprises a cover plate, said cover plate removably attachable to the belt drive platform, and wherein the belt is operably attachable to the cover plate.

7. (original) The system of claim 3 further comprising a housing suitable for supporting the patient during compressions, wherein the means for tightening the belt is operably attached to and disposed within the housing and wherein the cover plate is removably attachable to the housing.

8. (original) The system of claim 3 wherein the belt cartridge further comprises a compression pad attached to the first load distribution section.

9. (original) The system of claim 3 wherein the belt cartridge further comprises hook and loop fasteners disposed on the first

212/464

and second load distribution sections such that the first and second load distribution sections may be secured to each other over the chest of the patient.

10. (original) The system of claim 9 wherein the belt cartridge further comprises an eyelet attached to the first load distribution section and a peg attached to the second load distribution section, wherein the eyelet is sized and dimensioned to receive the peg and wherein the peg may be inserted into the eyelet when the first and second load distribution sections are secured over the chest of the patient.

11. (currently amended) The system of claim 10 & further comprising a means for determining if the peg is inserted into the eyelet.

12. (original) The system of claim 11 further comprising a means for determining if the peg is inserted into the eyelet.

13. (original) The system of claim 3 wherein the belt comprises at least one layer of unidirectional fibers held together with a resin.

14. (original) The system of claim 3 wherein:

the belt comprises a plurality of layers and each layer comprises a plurality of fibers held together by a resin;

all of the fibers composing any given layer are oriented along one direction; and

the orientation of the fibers of one layer is different from the orientation of the fibers of a second layer.

212/464

15. (original) The system of claim 2 wherein the compression belt cartridge is removably attachable to the means for tightening the belt.

16. (original) A system for performing chest compressions on a patient, said system comprising:

a housing suitable for supporting the patient during compressions;

a compression belt cartridge comprising:

a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral circumference of the patient when the belt is disposed around the patient;

said belt having pull straps, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

said belt having a first transition section attached to the first load distribution section and to the pull straps, and a second transition section attached to the second load distribution section and to the pull straps, wherein the second transition section is opposite the first transition section, and where the first and second transition sections have a trapezoidal shape;

212/464

wherein the first load distribution section and the second load distribution section are wider than the pull straps;

a first reinforcing plate attached to the first transition section and a second reinforcing plate attached to the second transition section;

a cover plate attachable to the housing;

a compression pad attached to the first load distribution section;

hook and loop fasteners disposed on the first and second load distribution sections such that the first and second load distribution sections may be secured to each other over the chest of the patient;

an eyelet attached to the first load distribution section and a peg attached to the second load distribution section, wherein the eyelet is sized and dimensioned to receive the peg and wherein the peg may be inserted into the eyelet when the first and second load distribution sections are secured over the chest of the patient; and

a means for tightening the belt operably connected to and disposed within the housing, wherein the pull straps are attachable to the means for tightening the belt.

17. (original) The system of claim 16 wherein the belt comprises at least one layer of unidirectional fibers held together with a resin.

212/464

18. (original) The system of claim 16 wherein the cover plate is removably attachable to the housing and wherein the pull straps are removably attachable to the means for tightening the belt:

the belt comprises a plurality of layers and each layer comprises a plurality of fibers held together by a resin;

all of the fibers composing any given layer are oriented along one direction; and

the orientation of the fibers of one layer is different from the orientation of the fibers of a second layer.

19. (original) The system of claim 16 further comprising a means for determining if the peg is inserted into the eyelet.

20. (original) The system of claim 16 wherein the pull straps are removably attachable to the means for tightening the belt and wherein the cover plate is removably attachable to the housing.

21. (currently amended) A method of performing chest compressions on a patient, said method comprising the steps of:

providing a system for performing chest compressions, said system comprising:

means for tightening a belt;

a compression belt cartridge comprising:

a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral

212/464

circumference of the patient when the belt is disposed around the patient;

said belt having pull straps for engaging the means for tightening, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

wherein the first load distribution section and the second load distribution are wider than the pull straps;

~~and a means for tightening the belt, wherein the compression belt cartridge is attachable to the means for tightening the belt;~~

engaging the pull straps to the means for tightening;

attaching the load distribution sections of the belt to each other and placing the load distribution sections over the chest of the patient; and

tightening the belt to compress the chest of the patient.

22. (original) The method of claim 21 comprising the further steps of:

detaching the load distribution sections of the belt from each other and removing the load distribution sections from the patient;

detaching the belt cartridge from the means for tightening the belt; providing a second belt cartridge, said second belt cartridge comprising:

212/464

a second belt, said second belt having a width corresponding to the superior-inferior height of the patient when the second belt is disposed around the patient, said second belt also having a length corresponding to the mediallylateral circumference of the patient when the second belt is disposed around the patient; said belt having a second set of pull straps, a third load distribution section attached to a first end of the second set of pull straps, and a fourth load distribution section attached to a second end of the second set of pull straps;

wherein the third load distribution section and the fourth load distribution are wider than the second set of pull straps;

attaching the second belt cartridge to the means for tightening the belt;

attaching the third and fourth load distribution sections of the second belt to each other and placing the third and fourth load distribution sections of the second belt over the chest of the patient; and

tightening the second belt to compress the chest of the patient.

23. (original) A method of performing chest compressions on a patient, said method comprising the steps of:

providing a system for performing chest compressions on a patient, said system comprising:



212/464

a housing suitable for supporting the patient during compressions;

a compression belt cartridge comprising: a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral circumference of the patient when the belt is disposed around the patient;

said belt having pull straps, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

said belt having a first transition section attached to the first load distribution section and to the pull straps, and a second transition section attached to the second load distribution section and to the pull straps, wherein the second transition section is opposite the first transition section, and where the first and second transition sections have a trapezoidal shape;

wherein the first load distribution section and the second load distribution are wider than the width of the pull straps; a first reinforcing plate attached to the first transition section and a second reinforcing plate attached to the second transition section;

a cover plate removably attachable to the housing;

212/464

a compression pad attached to the first load distribution section; hook and loop fasteners disposed on the first and second load distribution sections such that the first and second load distribution sections may be secured to each other over the chest of the patient;

an eyelet attached to the first load distribution section and a peg attached to the second load distribution section, wherein the eyelet is sized and dimensioned to receive the peg and wherein the peg may be inserted into the eyelet when the first and second load distribution sections are secured over the chest of the patient;

a means for tightening the belt operably connected to and disposed within the housing, wherein the pull straps are removably attachable to the means for tightening the belt;

placing the patient on the housing;

attaching the load distribution sections of the belt to each other and placing the load distribution sections over the chest of the patient; and

tightening the belt to compress the chest of the patient.

24. (original) The method of claim 23 comprising the further steps of:

detaching the load distribution sections of the belt from each other and removing the load distribution sections from the patient;

212/464

detaching the cover plate from the housing and detaching the belt from the means for tightening the belt;

providing a second belt cartridge, said second belt cartridge comprising:

a second belt, said second belt having a width corresponding to the superior-inferior height of the patient when the second belt is disposed around the patient, said second belt also having a length corresponding to the medial lateral circumference of the patient when the second belt is disposed around the patient; said belt having a second set of pull straps, a third load distribution section attached to a first end of the second set of pull straps, and a fourth load distribution section attached to a second end of the second set of pull straps;

said second belt having a third transition section attached to the third load distribution section and to the second set of pull straps, and a fourth transition section attached to the fourth load distribution section and to the second set of pull straps, wherein the fourth transition section is opposite the third transition section, and where the third and fourth transition sections have a trapezoidal shape;

wherein the third load distribution section and the fourth load distribution are wider than the second set of pull straps; third reinforcing plate attached to the third transition section and a fourth

212/464

reinforcing plate attached to the fourth transition section;

a second cover plate removably attachable to the housing;

a second compression pad attached to the third load distribution section;

hook and loop fasteners disposed on the third and fourth load distribution sections such that the third and fourth load distribution sections may be secured to each other over the chest of the patient;

a second eyelet attached to the third load distribution section and a second peg attached to the fourth load distribution section, wherein the second eyelet is sized and dimensioned to receive the second peg and wherein the second peg may be inserted into the second eyelet when the third and fourth load distribution sections are secured over the chest of the patient;

attaching the second belt to the means for tightening the belt and attaching the second cover plate of the second belt cartridge to the housing;

attaching the third and fourth load distribution sections of the second belt to each other and placing the third and fourth load distribution sections of the second belt over the chest of the patient; and

tightening the second belt to compress the chest of the patient.

212/464

25. (new) A system for performing chest compressions on a patient, said system comprising:

a compression belt cartridge comprising:

a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral circumference of the patient when the belt is disposed around the patient;

said belt having pull straps, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

a first transition section attached to the first load distribution section and to the pull straps, and a second transition section attached to the second load distribution section and to the pull straps, wherein the second transition section is opposite the first transition section;

a first reinforcing plate attached to the first transition section and a second reinforcing plate attached to the second transition section;

wherein the first load distribution section and the second load distribution are wider than the pull straps; and

212/464

a means for tightening the belt, wherein the compression belt cartridge is attachable to the means for tightening the belt.

26. (new) The system of claim 25 wherein the belt cartridge further comprises:

hook and loop fasteners disposed on the first and second load distribution sections such that the first and second load distribution sections may be secured to each other over the chest of the patient.

an eyelet attached to the first load distribution section;  
and

a peg attached to the second load distribution section,  
wherein the eyelet is sized and dimensioned to receive the peg and wherein the peg may be inserted into the eyelet when the first and second load distribution sections are secured over the chest of the patient.

27. (new) The system of claim 26 further comprising a means for determining if the peg is inserted into the eyelet.

28. (new) The system of claim 27 further comprising a means for determining if the peg is inserted into the eyelet.

29. (new) A method of performing chest compressions on a patient, said method comprising the steps of:

providing a system for performing chest compressions, said system comprising:

a compression belt cartridge comprising:

212/464

a belt, said belt having a width corresponding to the superior-inferior height of the patient when the belt is disposed around the patient, said belt also having a length corresponding to the medial-lateral circumference of the patient when the belt is disposed around the patient;

said belt having pull straps, a first load distribution section attached to a first end of the pull straps, and a second load distribution section attached to a second end of the pull straps;

wherein the first load distribution section and the second load distribution are wider than the pull straps;

and a means for tightening the belt, wherein the compression belt cartridge is attachable to the means for tightening the belt;

attaching the load distribution sections of the belt to each other and placing the load distribution sections over the chest of the patient; and

tightening the belt to compress the chest of the patient.

30. (new) The method of claim 29 comprising the further steps of:

detaching the load distribution sections of the belt from each other and removing the load distribution sections from the patient;

212/464

detaching the belt cartridge from the means for tightening the belt; providing a second belt cartridge, said second belt cartridge comprising:

a second belt, said second belt having a width corresponding to the superior-inferior height of the patient when the second belt is disposed around the patient, said second belt also having a length corresponding to the mediallylateral circumference of the patient when the second belt is disposed around the patient; said belt having a second set of pull straps, a third load distribution section attached to a first end of the second set of pull straps, and a fourth load distribution section attached to a second end of the second set of pull straps;

wherein the third load distribution section and the fourth load distribution are wider than the second set of pull straps;

attaching the second belt cartridge to the means for tightening the belt;

attaching the third and fourth load distribution sections of the second belt to each other and placing the third and fourth load distribution sections of the second belt over the chest of the patient; and

tightening the second belt to compress the chest of the patient.